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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,586	01/24/2002	Shinichi Kiribayashi	01-249	3474

23400 7590 07/30/2003

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RESTON, VA 20190

EXAMINER

BENSON, WALTER

ART UNIT	PAPER NUMBER
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2858

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/053,586

Applicant(s)  
Kiribayashi et al.

Examiner  
Walter Benson

Art Unit  
2858



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jan 24, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 7-10 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jan 24, 2002 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

Art Unit: 2858

### DETAILED ACTION

1. Claims 1-10 are presented for examination.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language.

3. Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Schoos et al. (US Patent No. 6,348,663 B1 and Schoos hereinafter).

4. As to claims 1 and 6, Schoos discloses a failure detection apparatus and method for a matrix sensor network comprising:

Art Unit: 2858

connecting a plurality of pressure sensitive sensors to row lines and column lines in a matrix, each sensor changing a resistance thereof according to a pressure applied (col. 3, lines 34-46);

connecting a monitoring device to at least one of ends of two row lines and ends of two column lines to form a series circuit (Fig 4; col. 7, lines 5-8);

applying a voltage to the series circuit (col. 5, lines 13-19);

checking a voltage of the series circuit to detect failure of the matrix sensor network (col. 4, lines 8-13).

***Allowable Subject Matter***

5. Claims 2-5 and 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record fails to teach or suggest individually or in combination a failure detection apparatus and method for a matrix sensor network including a pull-up resistor connected to one end of the series circuit and the other end of the series circuit is grounded. A buffer circuit for applying a same voltage to all row lines and column lines other than the two row lines and the two column lines of the series circuit. The multiplexers connected to the row lines and column lines for selecting in sequence the at least one of two row lines and

Art Unit: 2858

two column lines to change the series circuit to which the voltage source is connected for failure detection.

### **Prior Art Made of Record**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Shimanek et al. (US Patent No. 5,635,854) discloses verification circuitry to classify link resistances after programming into three zones;

B. Nunneley et al. (US Patent No. 5,754,963) discloses a sensor failure and detection system for use in a redundant sensor network;

C. Bohan, Jr. (US Patent No. 4,845,435) discloses a sensor fault detector for detecting a missing or shorted condition sensor of a plurality of sensors.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter Benson whose telephone number is (703) 306-4525. The examiner can normally be reached on Monday to Thursday and alternate Fridays from 6:30 AM to 5:00 PM.

Art Unit: 2858

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le, can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9318); Before-Final or (703) 872-9319; After-Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

Walter Benson *WB*  
Patent Examiner

July 21, 2003



**N. Le**  
Supervisory Patent Examiner  
Technology Center 2800